

ABSTRACT OF THE DISCLOSURE

A method of providing an efficient interaction with a user of a human-computer interface. The method comprises establishing two paths: a device fundamental path and an object
5 fundamental path. The two paths, which can comprise different geometric figures, are related by the interface in a defined correspondence. Motion by the user of an input device along the device fundamental path can be detected by the interface, and used to cause motion of an object in the computer application along the object fundamental path. The interface can also detect off-path motion of the input device. The interface, in some embodiments, can affect
10 characteristics of the object or of other parts of the application responsive to such off-path motion. For example, the interface can change the angle or other property of an object responsive to off-path motion of the input device. The interface can also apply forces to an input device responsive to such off-path motion of the device. For example, the interface can apply force resisting off-path motion of the device, providing the user feedback. This feedback can
15 guide the user to motion along the device fundamental path, and can allow the user to control an aspect (such as angle) of the application by control of the off-path force the user applies to the input device.